# IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

[m]

OPE JO	/
OCT 1 2 2004	OFFICE
FIENT & IR ATTEMP	

# TRANSMITTAL FORM

(to be used for all correspondence after initial filing)

Total Number of Pages in This Submission (including this sheet)

Application Number	10/705,717
Filing Date	November 10, 2003
First Named Inventor	Nelson et al.
Group Art Unit	1725
Examiner Name	
Attorney Docket No.	1219.BYU.CN2

FNOLOGUES (about all that anyly)								
	ENCLOSURES (check all that apply)							
☐ Amendment / Response ☐ After Final ☐ Affidavits/declaration(s) ☐ Appeal Communication: ☐ Appeal Notice ☐ Appeal Brief ☐ Reply Brief ☐ Assignment with Cover Sheet	□ Extension of Time Request □ month □ Fee Calculation Table □ Information Disclosure Statement □ Form 1449 □ Copies of IDS References □ Issue Fee Transmittal & Advance Order	□ Maintenance Fee Transmittal    year     □ Missing Parts Response     □ Notification of Change of Attorney     Address & Docket Number     ☑ Return Postcard     □ Revocation & Power of Attorney     □ Status Inquiry     □ Other:						
Certified Copy of Priority Document(s)	Remarks .							
□ Check in the amount of \$     □ Credit card authorization in the amount of \$     □ Declaration & Power of Attorney     □ Drawings sheets     □ Formal □ Informal								
SIGN	I ATURE OF APPLICANT, ATTORNEY OR A	GENT						
Attorney for Applicant  David \ MORR  136 So Salt La	Attorney for Applicant  David W. O'Bryant, Registration No. 39,793 MORRISS O'BRYANT COMPAGNI, P.C.  136 South Main Street, Suite 700 Salt Lake City, Utah 84101  (801) 478-0071 telephone; (801) 478-0076 facsimile							
Signature Livry W	Dant	Date 0/5/04						
CERTIFICATE OF MAILING UNDER 37 CFR § 1.8								
I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail, on the date indicated below, in an envelope addressed to Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.								
Typed or Printed Name / David	d W. O'Bryant							
Signature David W.	DRigert	Date 10/5/04						



## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT:

Nelson et al.

**SERIAL NO.:** 

10/705,717

FILING DATE:

November 10, 2003

TITLE:

FRICTION STIR WELDING USING

A SUPERABRASIVE TOOL

**ART UNIT:** 

1725

**EXAMINER:** 

DOCKET NO.: 1219.BYU.CN2

CERTIFICATE OF MAILING UNDER 37 C.F.R. § 1.8

I hereby certify that this correspondence is being deposited with the United States Postal Service as First Class Mail, postage prepaid, under 37 C.F.R. § 1.8 on the date indicated below and is addressed to Commissioner for Patents, P.O. Box 1450, Alexandria, VA

22313-1450.\_

David W. O'Bryant

Date of Deposit

# INFORMATION DISCLOSURE STATEMENT UNDER 37 C.F.R. § 1.97(b)

Mail Stop Amendment Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

Pursuant to 37 C.F.R. § 1.98(a)(1), enclosed is Form PTO-1449 which contains a list of all patents, publications, or other items that have come to the attention of one or more of the individuals designated in 37 C.F.R. § 1.56(c). Applicant respectfully submits that this Information Disclosure Statement is filed, pursuant to 37 C.F.R. § 1.97 (b), within three months of the filing date of the application, within three months of the date of entry of the national stage set forth in § 1.491or before the mailing date of a first Office action on the merits. Applicant requests that the references cited in the enclosed form PTO-1449 be made of record in the above-captioned application. While no representation is made that any of the references may be "prior art" within the meaning of that term under 35 U.S.C. §§ 102 or 103, the enclosed list of references is disclosed so as to fully comply with the duty of disclosure set forth in 37 C.F.R. § 1.56.

Moreover, while no representation is made that a specific search of office files or patent office records has been conducted or that no better art exists, the undersigned

attorney of record believes that the references listed, together with any other references which may have been previously submitted or listed, are the closest to the claimed invention (taken in its entirety) of which the undersigned is presently aware, and no reference which is more relevant to the claimed invention (taken in its entirety) has been knowingly withheld.

In compliance with 37 C.F.R. § 1.98(d), the Applicant identifies the following application which is relied on in the above-captioned application for an earlier effective filing date under 35 U.S.C. § 120 and in which one or more Information Disclosure Statements were submitted that comply with 37 C.F.R. § 1.98(a)-(c). Copies of all PTO-1449 and PTO-892 forms that were made of record in the previous application identified below are enclosed herewith for reference, but copies of the references cited therein are not provided as permitted by 37 C.F.R. § 1.98(d).

<u>TITLE</u>	SERIAL NO.	FILING DATE
FRICTION STIR WELDING USING A SUPERABRASIVE TOO!	09/851,596	May 8, 2001

Please charge any additional fees or credit any overpayment to Deposit Account No. 50-0881.

DATED this <u>5</u> day of October,2004.

Respectfully submitted,

David W. O'Bryant

Attorney for Applicant Registration No. 39,793

MORRISS O'BRYANT COMPAGNI, P.C.

136 South Main Street, Suite 700

Salt Lake City, Utah 84101

(801) 478-0071 telephone

(801) 478-0076 facsimile

2-1449		ILS DEPAR	ENT OF COM	MERCE	Application Numb	le	09/851,596		
1449		PATENT AN	RADEMARI	( OFFICE	Filing Date		May 8, 2001		
			nst inni io	ANT	First Named Inver	ntor	Nelson et al		
THEFOR	PRIO	R ART CITEI	) BY APPLIC	ANI	Group Art Unit		1725	Ü	
	<u>5</u> ]				Examiner Name		Unknown		
CT 1 2 2004	3	Sheet 1 of	3		Attorney Docket		1219.BYU.NP	2	
	\$	, Dilect 1 01							
C& TRADENS	<u> </u>								
			U.S	. PATEN	T DOCUMENTS	<del></del>		ľ	
EXAMINER INITIALS		DOCUMENT NUMBER	DATE .		NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE	
	AA	5,611,479	March 18, 1997	Rosen					
	AB	5,697,511	Dec. 16, 1997	Bampton			0		
	AC	5,713,507	Feb. 3, 1998	Holt et al.			1		
	AD	5,769,306	June 23, 1998`	Colligan					
	AE	5,794,835	August 18, 1998	Colligan e	et al.	<u> </u>		-	
	AF	5,813,592	Sep. 29, 1998	Midling e	t al.	<del> </del>			
	AG	5,971,247	Oct. 26, 1999	Gentry					
	АН	. 5,971,252	Oct. 26, 1999	Rosen et	al	<u> </u>		<del> </del>	
	Al	5,975,406	Nov. 2, 1999	Mahoney	et al.	<del> </del>			
	AJ	6,045,027	April 4, 2000	Rosen et	al	<del>-</del>			
	AK	6,045,028	April 4, 2000	Martin et	al.			<del> </del>	
	AL	6,050,474	April 18, 2000	Aota et a	1	·			
	AM	6,050,475	April 18, 2000	Kinton e	t al.				
	AN	6,051,325	April 18, 2000	Talwar e	t al.				
	AO	6,070,784	June 6, 2000	Holt et a	1.			,	
	AP	6,168,066 B1	Jan. 2, 2001	Arbegas	1				
	AQ	6,168,067 B1	Jan. 2, 2001	Waldror					
	AR	6,173,880 B1	Jan. 16, 2001	Ding et					
		6,193,137 B1	Feb. 27. 2001	Ezumi e	•				
	. AS	0,175,157 51			TENT DOCUMENTS	 S			
	T	DOCUMENT			COUNTRY	CLAS	S SUBCLAS	TRANSLATION YES NO	
	1,77	NUMBER ED 0 707 043 A			BP				
	AT	EP 0 797 043 A			EP .				
	AU	EP 0 810 054 A1			EP				
	AV	EP 0 810 055 B1			EP				
	AW	EP 0 810 056 A3			EP				
l	AX	EP 0 833 097 A2	April 1, 1	1770	ابد	<del></del>			

Sep. 30, 1998

Jan. 7, 1999

Jan. 27, 1999

Jan. 27, 1999

June 30, 1999

EP

EP

EP

EP

EP

EP 0 867 254 A1

EP 0 888 843 A1

EP 0 893 189 A2

EP 0 893 190 A2

EP 0 925 964 A2

ΑZ

ВА

BB

ВС

PTO-1449		U.S. DEPAR	ENT OF COMMERC	E	Application Number		09/85	1,596		
-10-14-7		PATENT AN-	RADEMARK OFFIC	CE	Filing Date		May 8	3, 2001		
	r nn IC	AD ADT CITED	BYADPLICANT		First Named Inventor		Nelso	n et al		
LISTO	FPRIC	R ARI CITED	ANI BICANG	$ \cdot $	Group Art Unit		1725			
			OCT 12 mm		Examiner Name	\	Unkn	own		
		Sheet 2 of 3	E E	7	Attorney Docket	-∤	1219.	BYU.NI	2	
		Sheet 2 of 3	PADEMAN!							
	TT	77 0 000 (50 A)	July 14, 1999	EP		$\Box$				
	BD BE	EP 0 928 659 A1 EP 0 947 280 A1		EP					,	
	BF	EP 0 968 788 A2		EP			<u> </u>			
•	BG	EP 0 972 605 A2		ΕP			$\Box$			
	ВН	EP 0 985 483 A2		EP			11,			
	BI	EP 0 992 314 A2		EP	·		\	\ {	<del> </del>	
· ·	ВЈ	EP 1 029 627 A1	August 23, 2000	EP			-	<del></del>	<b>_</b>	
	ВК	EP 1 046 453 A2	Oct. 25, 2000	EP			1_	-}		
	BL	EP 1 048 390 A2	Nov. 2, 2000	EP			ļ	-{		·,
	ВМ	EP 1 055 478 A1	Nov. 29, 2000	EP			-			
	BN	EP 1 057 572 A2	Dec. 6, 2000	EP			<del> </del>			
	во	EP 1 057 573 A2	Dec. 6, 2000	EP					_	
	. BP	EP 1 057 574 A2	Dec. 6, 2000	EP		<u>.                                    </u>				
	ВQ	EP 1 057 575 A2	Dec. 6, 2000	EP						
	BR	EP 1 057 576 A2	Dec. 12, 2000	EP						,
	BS	GB 2 306 366 A	May 7, 1997	GB						
	ВТ	WO 00/02698	Jan. 20, 2000	EP					-1	
	ВU	WO 00/02699	Jan. 20, 2000	US						
	в٧	WO 00/02704	Jan. 20, 2000	US	3		_		$\bot$	
	BW		Jan. 27, 2000	Al	J			/		
	вх		Sep. 28, 2000	DI	E					
	ВУ		June 10, 1993	G	В		_	{	_	
	BZ		May 1, 1997	N	0		_			
	CA		Dec. 24, 1997	S	E		_			
	СВ		April 2, 1998	s	E		-+.	<del>/</del>		
	CC		Oct. 15, 1998	s	E		_/			
	CI		Nov. 19, 1998	s	E		<del>/</del>			
	CI		Dec. 30, 1998		GB		1		-	
	CI		July 1, 1999		SE					
	C		July 1, 1999	1	JS					
	C		July 8, 1999		us		$\dashv$			
	C		July 15, 1999		SE					
	C		August 12, 1999	$\perp$	NO					
			Oct. 21, 1999	·	GB	·				

ГО-1449		U.S. DEPAR	ENT OF COMME	RCE	Application Number	09/851,596	
10,147	PATENT AND TRADEMARK				Filing Date	May 8, 2001	
' * * * * * * * * * * * * * * * * * * *	-	on Ann Cimer	DYAROSICAT	r	First Named Inventor	Nelson et al	
LIST O	FPRI	OR ART CITEI	BA SENTIBAL	\	Group Art Unit	1725	
			Or	5	Examiner Name	Unknown	
		Sheet 3 of	3 9 12 8000	i.	Attorney Docket	1219.BYU.NP2	
		7	THADENS RY	Ç			
	CL	WO 99/54081	Oct. 28, 1999	GB	·		
	СМ	WO 99/58288	Nov. 18, 1999	us			
	CN	WO 99/65637	Dec. 23, 1999	JP			<u>:</u>
		OTHE	R PRIOR ART (Incl	uding	Author, Title, Pertinent Pa	ges, Etc.	
	T						
	<del>                                     </del>						
· ·	-					·	
EXAMINER	<u> </u>	1	<u> </u>		DATE CONSIDERED		

PTO-1449 U.S. DEPARTA T OF COMMERCE	Application Number	09/851,596
PATENT AND 'I ADEMARK OFFICE	Filing Date	May 8, 2001
LIST OF PRIOR ART CITED BY APPLICANT	First Named Inventor	Nelson et al.
( ) 200 E	Group Art Unit	1725
OT 12 2004 (E)	Examiner Name	
Sheet 1 of 1	Attorney Docket	1219.BYU.NP2
Alcor a TAX		

			. U.S	S. PATENT DOCUMENTS		<del>,</del> _	
EXAMINER INITIALS		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
•	AA	6,138,895	Oct. 31, 2000	Oelgoetz et al.			<del></del>
	AB.	6,053,391	April 25, 2000	Heideman et al.			
•	AC	5,829,664	Nov. 3, 1998	Spinella et al.			
	AD	5,811,755	Sept. 22, 1998	McGee	·		,
	AE	5,718,366	Feb. 17, 1998	Colligan		<u>.</u>	
	AF	4,144,110	Mar. 13, 1979	Luc			
	AG.						
	АН						
	Al						
	ĽΑ						
_	AK						
			FORI	EIGN PATENT DOCUMENT	S		
		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES NO
	AL				,		
	AM						
	AN						
· · ·	AO						
	AP						
		ОТН	FR PRIOR ART	(Including Author, Title, Per	rtinent Pages.	Etc.	
	AR		DATRIOR ART	(Including Flather, 1999) 1 of			
	AS						
•	l VO	<del>   </del>					•
	АТ			'			

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

ONT 12 2004	Application/Control No. 09/851,596	Applicant(s)/F Reexaminatio NELSON ET	n
\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	Examiner	Art Unit	Dogg 1 of 1
PATEMY & IMAGERY	Zidia Pittman	1725	Page 1 of 1

## U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
	Α	US-5,758,999	06-1998	Geise, Samuel C.	409/231
	В	US-			
	С	US-			1
	. D	US-		·	
	E	US-			
•	F	US-			
	G	US-			
	Н	US-			
	1	US-			
	J	US-	·		
	к	US-		·	
	L	US-			
	М	US-			

# FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					·
	0	·				
-	Р					
	Q					4
	R				· .	
·	s					
	Т					

## NON-PATENT DOCUMENTS

*	Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)								
	U								
	V								
	w								
	.x								

\*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).) Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

	_	Wollce of Kererence	2 Oited		Examiner		Art Unit		Page 1 of 1
& TI	ADE	Motice of Reference	•		Zidia Pittman		1725	1	
				U.S. P/	TENT DOCUMEN	TS			L
Т		Document Number	Date	T		Name			Classification
$\downarrow$		Country Code-Number-Kind Code	MM-YYYY	Collings	ot al			<del> </del>	228/13
1	A	US-5,794,835	08-1998	Colliga	i et ai.			+	
$\downarrow$	В	US-		<b></b>					
$\downarrow$	С	US-						-	
┸	.D	US-			<del></del>			<del>  -</del> -	
1	E	US		ļ			·	-	
ŀ	F	US-						-	
	G '	US-					· · · · · · · · · · · · · · · · · · ·	-	
	Н	US-		ļ				-	
ſ	1	US-			•	<u>.</u>			
1	J	US-		-					
T	ĸ	US-		2					
	L	US-		`				<u> </u>	
1	М	US-							
	٠.			FOREIGN	PATENT DOCUM	MENTS		<del></del>	
		Document Number Country Code-Number-Kind Code	Date MM-YYYY		Country	Nar	me		Classification
1	N								
+	N O			-					
	0	<u>.</u>							
	O P								
	O P								
	O P Q R								
	O P Q R								
	O P Q R					NTS			
	O P Q R	inclu	ude as applicab	NON-I				ges)	
	O P Q R S	inclu	ude as applicab	NON-I	PATENT DOCUME			ges)	
	O P Q R	inclu	ude as applicab	NON-I	PATENT DOCUME			ges)	
	O P Q R S T U	inclu	ude as applicab	NON-I	PATENT DOCUME			ges)	
	O P Q R S	Inclu	ude as applicab	NON-I	PATENT DOCUME			ges)	
	O P Q R S T U V	inclu	ude as applicab	NON-I	PATENT DOCUME			ges)	
	O P Q R S T U	Inclu	ude as applicab	NON-I	PATENT DOCUME			ges)	
*	O P Q R S T U V	Inclu	ude as applicab	NON-I	PATENT DOCUME			ges)	

Application/Control No.

09/851,596

Applicant(s)/Patent Under

Reexamination

NELSON ET AL.